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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,689	04/17/2006	Shu Zhang	CN 020036	8969

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EXAMINER	
KHAN, MEHMOOD B	

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
04/18/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/540,689	ZHANG, SHU	
	Examiner	Art Unit	
	MEHMOOD B. KHAN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,6,7,8,9,11,13,14,15,16,18,20,21,22,23,24* is/are rejected.

7)☒ Claim(s) *3,5,10,12,17 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

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DETAILED ACTION

Claim Objections

1. Claims 2 and 10 are objected to because of the following informalities:

2. Claim 2 is objected to because it contains the term "lease" which should be changed to -- least --.

Allowable Subject Matter

1. Claims 3, 5, 10, 12, 17, 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter: Consider claims 3 and 5, none of the cited prior arts during examination disclose the limitation of calculating the transmit power according to the disclosed formula.

3. The following is a statement of reasons for the indication of allowable subject matter: Consider claims 10 and 12, none of the cited prior arts during examination disclose the limitation of calculating the transmit power according to the disclosed formula.

4. The following is a statement of reasons for the indication of allowable subject matter: Consider claims 17 and 19, none of the cited prior arts during examination disclose the limitation of calculating the transmit power according to the disclosed formula.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 8, 15 and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Nelson et al. (US 20030060224 herein Nelson).

Claim 1, Nelson discloses a method for controlling a mobile terminal's transmit power in CDMA-TDD system **(Abstract, 0013, 0048)**, Nelson discloses (a) receiving a power control message from a base-station transmitted via a downlink **(0047, where Nelson discloses a maintenance channel)**; Nelson discloses (b) acquiring a channel gain value between said mobile terminal and said base-station according to information transmitted via the downlink **(Fig. 9: 930, where Nelson discloses computing path loss)**; Nelson discloses (c) calculating a value of the transmit power of said mobile terminal according to said power control message, said channel gain value and a set processing gain value **(Fig. 9: 950, where Nelson discloses transmit power, it is well known in the art that the processing gain is the ratio of the spread bandwidth to un-spread bandwidth of the signal)**; Nelson discloses (d) adjusting the transmit power of said mobile terminal according to said value of the transmit power **(Fig. 9: 975, where Nelson disclose increasing power)**, Nelson discloses wherein said adjusting the transmit power of said mobile terminal is synchronized with those of other terminals assigned within a same time slot **(Abstract, 0051, 0052, where Nelson discloses adjusted power based on synchronization signal)**.

Claim 8, Nelson discloses a device for controlling a mobile terminal's transmit power in CDMA-TDD system **(Abstract, 0013, 0048)**, comprising: a receiving module, receiving a power control message from a base-station transmitted via a downlink **(0038, 0047, where Nelson**

discloses processors, a maintenance channel); Nelson discloses a channel gain calculating module, acquiring a channel gain value between said mobile terminal and said base-station according to information transmitted via the downlink **(0038, Fig. 9: 930, where Nelson discloses processors and computing path loss)**; Nelson discloses and a transmit power calculating and setting module, calculating a value of the transmit power of said mobile terminal according to said power control message, said channel gain value and a set processing gain value **(0038, Fig. 9: 950, where Nelson discloses processors, transmit power, it is well known in the art that the processing gain is the ratio of the spread bandwidth to un-spread bandwidth of the signal)**, Nelson discloses adjusting the transmit power of said mobile terminal according to said value of the calculated transmit power **(Fig. 9: 975, where Nelson disclose increasing power)**, Nelson discloses wherein said adjusting the transmit power of said mobile terminal is synchronized with those of other terminals assigned within a same time slot **(Abstract, 0051, 0052, where Nelson discloses adjusted power based on synchronization signal)**.

Claim 15, Nelson discloses a mobile terminal in CDMA-TDD system **(Abstract, 0013, 0048)**, Nelson discloses a receiving means, receiving and processing wireless signals from a downlink **(0038, 0047, where Nelson discloses processors, a maintenance channel)**; Nelson discloses a transmitting means, transmitting wireless signals via a uplink **(0038, Abstract where Nelson discloses a processor, reply in the reverse link)**; Nelson discloses a transmit power control means, receiving a power control message transmitted via the downlink **(0038, 0047, where Nelson discloses processors, a maintenance channel)**; Nelson discloses after acquiring a channel gain value between said mobile terminal and a base-station, calculating a value of the transmit power of said mobile terminal according to said power control message,

said channel gain value and a set processing gain value **(Fig. 9: 910-950, where Nelson discloses calculating the transmit power value, it is well known in the art that the processing gain is the ratio of the spread bandwidth to un-spread bandwidth of the signal)**, Nelson discloses adjusting the transmit power of said mobile terminal according to said value of the transmit power **(Fig. 9: 975, where Nelson disclose increasing power)**, Nelson discloses wherein said adjusting the transmit power of said mobile terminal is synchronized with those of other terminals assigned within a same time slot **(Abstract, 0051, 0052, where Nelson discloses adjusted power based on synchronization signal)**.

Claim 22, Nelson discloses a method for power control in a base station **(Abstract)**, Nelson discloses transmitting a power control message via a downlink **(0038, 0047, where Nelson discloses processors, a maintenance channel)**; Nelson discloses transmitting information via the downlink, wherein said information is related to a transmit power used when the base station transmits signals **(0047, where Nelson discloses power control information)**; Nelson discloses simultaneously receiving power information transmitted by each mobile terminal assigned in a same time slot **(0045, 0051, where Nelson discloses power control message and transmission in same time slot)**.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2, 4, 6, 7, 9, 11, 13, 14, 16, 18, 20, 21, 23 and 24rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 20030060224 herein Nelson) in view of Chen et al. (US 20030134655 herein Chen).

Claim 2, Nelson does not disclose wherein said power control message at lease includes items of background noise, inter-cell interference power level and target signal-to-interference ratio which have changed.

In an analogous art, Nelson discloses wherein said power control message at lease [sic] includes items of background noise, inter-cell interference power level and target signal-to-interference ratio which have changed **(0081, where Nelson discloses updated quality metrics)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson with the teachings of Chen so as to allow for rapid power adjustment **(0012)**.

Claim 4, as analyzed with respect to the limitations as discussed in claim 2.

Claim 6, Nelson does not disclose wherein when said power control message changes, the mobile terminal receives said power control message broadcast via the downlink.

In an analogous art, Chen discloses when said power control message changes, the mobile terminal receives said power control message broadcast via the downlink **(0070)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson with the teachings of Chen so as to allow for rapid power adjustment **(0012)**.

Claim 7, as analyzed with respect to the limitations as discussed in claim 6.

Claim 9, as analyzed with respect to the limitations as discussed in claim 2.

Claim 11, as analyzed with respect to the limitations as discussed in claim 4.

Claim 13, as analyzed with respect to the limitations as discussed in claim 6.

Claim 14, as analyzed with respect to the limitations as discussed in claim 6.

Claim 16, as analyzed with respect to the limitations as discussed in claim 2.

Claim 18, as analyzed with respect to the limitations as discussed in claim 4.

Claim 20, as analyzed with respect to the limitations as discussed in claim 6.

Claim 21, as analyzed with respect to the limitations as discussed in claim 6.

Claim 23, as analyzed with respect to the limitations as discussed in claim 2.

Claim 24, as analyzed with respect to the limitations as discussed in claim 6.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEHMOOD B. KHAN whose telephone number is (571)272-9277. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. B. K./

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617